

## ABSTRACT

Lithographic Apparatus, Device Manufacturing Method, and Device Manufactured Thereby

5            On-the-Fly leveling in a lithographic apparatus is conducted using a setpoint  
derived by filtering the output of the combination of the output of a level sensor and another  
position sensor (LVDT or IFM). The level sensor may include look-ahead. The filter may be  
a low pass filter to cut-off level variations of wavelength shorter than the width of the slit  
during a scanning exposure. The filter may also be selected to reduce cross-talk between tilt  
10 movements and horizontal displacements.

Fig. 3